IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Previously Presented) A signaling system for automated location-dependent recognition of flood risks, comprising:

a central unit including a multi-dimensional lookup table corresponding to a spatial high resolution grid of a specific geographic territory, the flood risk factors being associated with the grid and indicating an average flood frequency and/or susceptibility to flooding within a grid cell, the flood risk factors being calculated based on flood zone data associated with the specific geographic territory, the flood zone data indicating in the specific geographic territory flood zones with defined return periods,

distributed gauging stations configured to determine river discharge parameters within an area of multiple grid cells of the grid and to transmit the river discharge parameters over a network to the central unit, the river discharge parameters comprising at least values for a return period as a measure of intensity of flood events,

the central unit comprising a correlation-module configured to generate an event-specific average probabilistic water depth value for a flood event based on the linked flood risk factors and the river discharge values, and to associate the probabilistic water depth value with the corresponding grid cell, and

a cell arbitrator module acting on at least one grid-based composition module according to the average probabilistic water depth values.

Claim 2 (Previously Presented) A system according to claim 1, characterized in that the grid-based composition module comprises at least an early warning system signaling flood risk in the appropriate cell.

Claim 3 (Previously Presented) A system according to claim 1, characterized in that the grid-based composition module comprises automated damage prediction systems and/or damage covering systems for land-based installations based upon at least the flood risk factors.

Claim 4 (Previously Presented) A system according to one of the claims 1 to 3, characterized in that the grid-based composition module comprises at least an optimization and/or control module for protection installation of technical and/or industrial facilities based upon at least the flood risk factors.

Claim 5 (Previously Presented) A system according to claim 1, further comprising:

a linking module with at least one adaptable event factor providing spatial and/or temporal correlations for the discharge measurements of different gauging stations.

Claim 6 (Previously Presented) A system according to claim 1, wherein the gauging stations comprise at least a sensor and/or measuring fixture to determine the river discharge parameters.

Claim 7 (Previously Presented) A system according to claim 1, wherein the gauging stations measuring the river discharge parameters are located in a low spatial resolution in relation to the grid of the flood risk factors.

Claim 8 (Previously Presented) A system according to claim 1, wherein the gauging stations measuring the river discharge parameters are set to a high temporal resolution.

Claim 9 (Previously Presented) A system according to claim 1, wherein the resolution of the grid of the flood risk factors is given by cell sizes below $10{,}000m^2$.

Claim 10 (Previously Presented) A system according to claim 1, wherein the flood risk factors are derived based upon at least geomorphologic parameters.

Claim 11 (Previously Presented) A system according to claim 10, wherein the geomorphologic parameters comprise horizontal distance and/or elevation difference to the next river.

Claim 12 (Previously Presented) A system according to one of the claims 10 and 11, wherein the geomorphologic parameters comprise horizontal distance and/or elevation difference to the next drainage area.

Claim 13 (Previously Presented) A system according to claim 1, wherein the central unit comprises an interpolation module deriving the flood risk factors based upon a country-specific flood zone table depending on horizontal distance and/or elevation difference.

Claim 14 (Previously Presented) A system according to claim 13, wherein the country specific flood zone table comprises the First American 100-year flood zone table.

Claim 15 (Currently Amended) A system according to claim 1, wherein the correlation module comprises at least five adaptable correlation parameters x_1, x_2, ..., x_5, and the adaptable parameters are correlated by

$$H = \max\left(\frac{x_1 P - x_2 + x_3 \ln(T)}{x_4 P + x_5}, 0\right)$$ [[.]], wherein

H denotes the average probabilistic water depth values,

P denotes the flood risk factors, and

T denotes the river discharge parameters.

Claim 16 (Previously Presented) A system according to claim 1, wherein vulnerability factors are determined based upon historical dataset of corresponding portfolios and a generalized insurance risk is automated derivable from the vulnerability factors.

Claim 17 (Previously Presented) A system according to claim 1, wherein the system comprises different correlation modules for flood cell zones along a coast located different height m a. s. l..

Claim 18 (Previously Presented) A system according to claim to 17, wherein the system comprises at least one specific correlation module determining flood cell zones along a coast located lower than 10 m a. s. l..

Claim 19 (Previously Presented) A system according to one of claims 17 and 18, wherein the determination of the flood cells along a coast are additionally based upon storm surge events.

Claim 20 (Previously Presented) A system according to claim 17, wherein the determination of the flood cells along a coast additionally comprises a Sea, Lake and Overland Surges from Hurricanes (SLOSH) method.

Claim 21 (Previously Presented) A system according to claim 1, wherein the system is accessible over a network by client nodes, the system further comprises a billing module with a billing gateway interface for access to the central unit first call detail records of a client node being transmittable from the central unit to the billing module.

Claim 22 (Previously Presented) A system according to claim 21, further comprising a proxy module for downloading second call detail records of the client node from the central unit at least the identity of the client node and/or duration of the access to the central unit and/or service being able to be captured and able to be passed on to the billing module.

Claim 23 (Previously Presented) A system according to claim 22, characterized in that by means of the billing module of the system TAP files corresponding to the obtained service are able to be generated, and these are transmittable, together with billing instructions, to a clearing module, the billing instructions including at least user-specific and/or service-provider-specific billing data.

Claim 24 (Previously Presented) A method for automated location dependent recognition of flood risks, comprising:

generating a spatial high resolution grid for a specific geographic territory and flood risk factors, the flood risk factors being calculated based on flood zone data associated with the specific geographic territory and indicating the average flood frequency and/or susceptibility to flooding within a grid cell, the flood zone data indicating in the specific geographic territory flood zones with defined return periods;

determining river discharge parameters by distributed gauging stations, the river discharge parameters comprising at least values for a return period as a measure of intensity of flood events; and

linking the flood risk factors and the river discharge parameters by a correlation module to generate an event-specific averaged probabilistic water depth value for a flood event, the probabilistic water depth value being associated with the corresponding grid cell.

Claim 25 (Previously Presented) A method according to claim 24, wherein at least one adaptable event factor provides spatial and/or temporal correlations for discharge measurements of different gauging stations.

Claim 26 (Previously Presented) A method according to claim 24, wherein river water level parameters are measured by the gauging stations based upon which river water level parameters are determined.

Claim 27 (Previously Presented) A method according to claim 24, wherein the river discharge parameters are measured and/or determined in a low spatial resolution in relation to the grid of the flood risk factors.

Claim 28 (Previously Presented) A method according to claim 24, wherein the river discharge parameters are measured and/or determined in a high temporal resolution.

Claim 29 (Previously Presented) A method according to claim 24, wherein the resolution of the grid is given by cell sizes below $10{,}000m^2$.

Claim 30 (Previously Presented) A method according to claim 24, wherein the flood risk factors are derived based upon at least geomorphologic parameters.

Claim 31 (Previously Presented) A method according to claim 30, wherein the geomorphologic parameters comprise horizontal distance and/or elevation difference to the next river.

Claim 32 (Previously Presented) A method according to one of the claims 30 and 31, wherein the geomorphologic parameters comprise horizontal distance and/or elevation difference to the next drainage area.

Claim 33 (Previously Presented) A method according to claim 24, wherein the flood risk factors are derived by an interpolation module based upon a country-specific flood zone table depending on horizontal distance and/or elevation difference.

Claim 34 (Previously Presented) A method according to claim 33, characterized in that the country specific flood zone table comprises the First American 100-year flood zone table.

Claim 35 (Currently Amended) A method according to claim 24, wherein the correlation module comprises at least five adaptable correlation parameters x_1, x_2, ..., x_5, and the adaptable parameters are correlated by

$$H = \max\left(\frac{x_1 P - x_2 + x_3 \ln(T)}{x_4 P + x_5}, 0\right)$$ [[.]] , wherein

H denotes the average probabilistic water depth values,

P denotes the flood risk factors, and

T denotes the river discharge parameters.

Claim 36 (Previously Presented) A method according to claim 24, wherein vulnerability factors are determined based upon historical dataset of corresponding portfolios and a generalized insurance risk is automated derivable from the vulnerability factors.

Claim 37 (Previously Presented) A method according to claim 24, wherein different correlation modules are used for flood cell zones along a coast located different height m a. s. l..

Claim 38 (Previously Presented) A method according to claim to 37, wherein flood cell zones along a coast located lower than 10 m a. s. l. are determined by a specific correlation module.

Claim 39 (Previously Presented) A method according to one of claims 37 and 38, wherein the determination of the flood cells along a coast are additionally based upon storm surge events.

Claim 40 (Previously Presented) A method according to claim 37, wherein the determination of the flood cells along a coast additionally comprises a Sea, Lake and Overland Surges from Hurricanes (SLOSH) method.

Claim 41 (Canceled).